

What is claimed is;

- 1 1. A solution preparing apparatus comprising:
 - 2 a chamber, an inside of which is divided into a first compartment
 - 3 and a second compartment by a movable partition;
 - 4 a dissolving solution supply line for supplying a dissolving
 - 5 solution to the first compartment of the chamber;
 - 6 a solution tank connected with the first compartment through
 - 7 a first solution preparing line and connected with the second
 - 8 compartment through a second solution preparing line;
 - 9 a transporting pump provided in the second solution preparing
 - 10 line
 - 11 a concentration meter;
 - 12 a solution transporting line for transporting solution filled
 - 13 in the second compartment to the point of use; and
 - 14 a circulating line connecting the first solution preparing
 - 15 line between the first compartment and the solution tank to the second
 - 16 solution preparing line between the transporting pump and the second
 - 17 compartment;
 - 18 said solution tank being provided with an upstream tank portion
 - 19 and a downstream tank portion in liquid communication at bottoms
 - 20 thereof, and at least one filter provided in a downstream portion

21 of the downstream tank portion.

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1 2. The solution preparing apparatus claimed in claim 1,
2 wherein the solution tank is a U-shaped tank constructed of a
3 relatively small-diameter upstream tank portion and a relatively
4 large-diameter downstream tank portion connected at bottoms thereof
5 by a bottom portion of the U-shaped tank having small-diameter so
6 as to communicate with each other.

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1 3. The solution preparing apparatus claimed in claim 1,
2 wherein the solution tank is a tubular tank divided into an upstream
3 tank portion and a downstream tank portion by a vertically arranged
4 diaphragm.

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1 4. The solution preparing apparatus claimed in claim 1, wherein
2 a powder supply means is provided above the upstream tank portion
3 of the solution tank.

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1 5. The solution preparing apparatus claimed in claim 1, wherein
2 a level detecting sensor is provided in the upstream tank portion
3 of the solution tank.

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1 6. The solution preparing apparatus claimed in claim 1, wherein
2 a powder level sensor is provided in the downstream tank portion
3 of the solution tank.

1 7. The solution preparing apparatus claimed in claim 1, wherein
2 a heater is provided in the second solution preparing line downstream
3 of the solution tank.